

**MICRO-DIGITAL TWINPLUG IGNITION FOR B.M.W.PRE-79 12 VOLT MOTORCYCLES**

THIS SYSTEM SHOULD BE USED WITH TWO 6 VOLT, DUAL OUTPUT COILS, EACH HAVING A 2.0 OHM PRIMARY WINDING RESISTANCE.

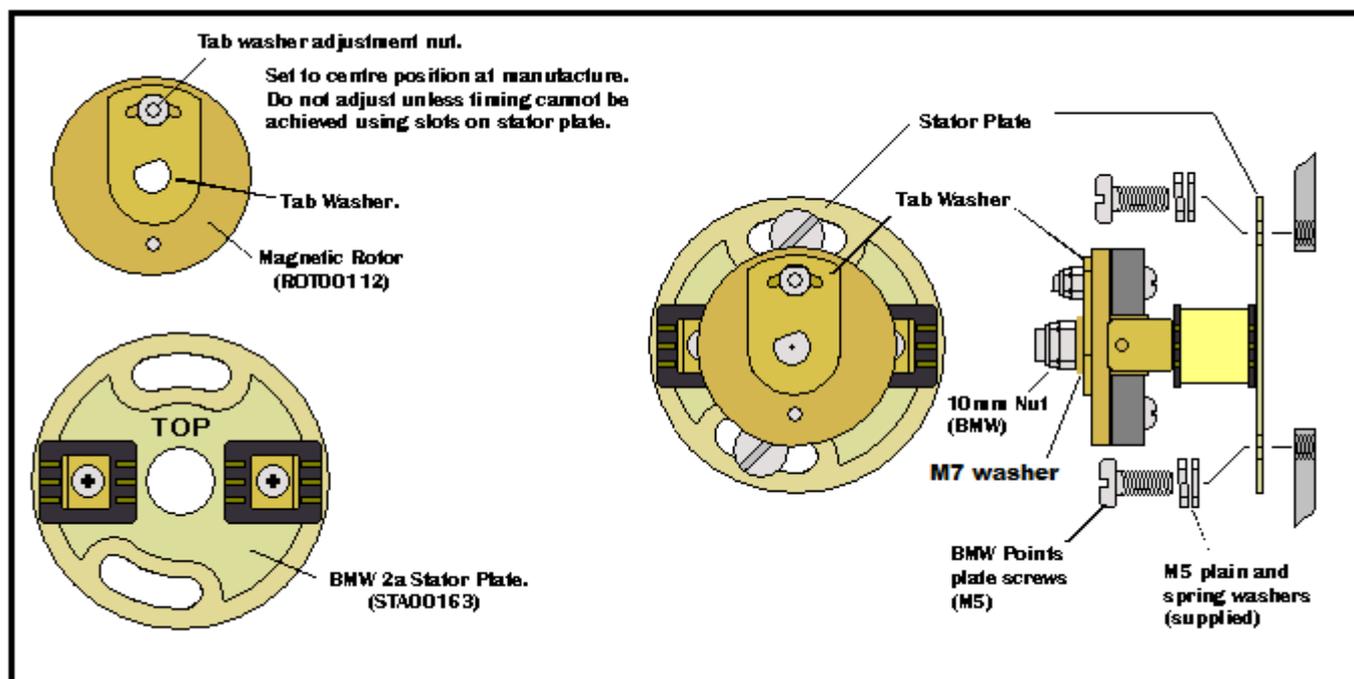
**Comprising:-**

- a) Red Micro-Digital Electronic Box (BOX00036)  
 b) Stator Plate (STA00163) round printed circuit with two coils  
 c) Magnetic Rotor (ROTO0112) round plated steel unit with two magnets fitted  
 d) Plastic straps, 8 Small, 2 Large,  
 e) Piggyback spade/2 receptacle connectors, Black link wire.

**Fitting instructions:**(Tools required are the standard tool kit plus a strobe timing lamp for final timing. Suppressed spark plug caps must be used with this ignition.)

- 1) Open seat and remove tool tray.
- 2) Undo the two wingnuts holding the rear of the petrol tank.
- 3) Turn off both petrol taps and undo the pipes from the bottom of each using the 24mm end of the large "C" spanner, or slide the pipes off.
- 4) Remove petrol tank by sliding back and lifting.
- 5) Remove the positive battery terminal.  
(FAILING TO DO THIS COULD DAMAGE THE ALTERNATOR CONTROL UNIT, WHEN REMOVING THE ENGINE FRONT COVER)
- 6) Remove engine front cover by undoing the three caphead screws. (YOU MAY HAVE TO REMOVE THE HORN)
- 7) Remove contact breaker and auto-advance unit by undoing the two holding screws and single 10mm fitting nut on the end of the shaft.
- 8) Disconnect the points wire from the condenser unit and pull out of the long rubber grommet.
- 9) Feed the wire on the ignition stator plate through the long rubber grommet (from the large end, female connector first).
- 10) Fit the stator plate into the contact breaker housing with its 'TOP' marking above the shaft. Use original screws and four supplied washers to secure the plate in the centre of the adjustment slots. (See Fig.1.)
- 11) Refit rubber grommet into mounting bracket and crankcase.
- 12) Slide the magnet rotor unit onto the end of the "D" shaped contact breaker shaft with the magnets facing the stator plate (take care not to damage the "D" hole in the tab washer as it is a tight fit). Testing its fit with it facing the wrong way is a good idea. If too tight, remove the plating on the inside of the hole with a file.
- 13) Lightly bias the rotor anticlockwise and fit the 10mm fitting nut and washer (DO NOT OVERTIGHTEN).
- 14) Remove the large black wire from the right hand ignition coil (this is no longer used), the green wire from the left hand ignition coil and the link wire connecting the coils. Remove both ignition coils and fit the Micro Power coils in their place. Refit the original wiring loom earth wire on one of the coil mounting screws.
- 15) Make and fit the 4 HT cables. Use the supplied copper core wire and the 5000 ohm suppressed spark plug caps.
- 16) See Fig.3. Fit the electronic box behind the ignition coils with the wires exiting on the left hand side, use the long plastic straps around the top frame tube to secure.
- 17) Connect the green wire from the electronic box to the green ignition switch +12 volt wire from the wiring loom.
- 18) Connect the black wire from the electronic box to the -neg terminal of the left hand (L/H) ignition coil connection.
- 19) Make and fit the Link wire and fit between the L/H coil '+' and the R/H coil '-' terminals.
- 19) Route the sleeved black/white & black/yellow wires over the rubber air intake. Remove the rubber grommet at the top of the front engine case and run through the grommet slot, replace the grommet and connect to the new stator plate wires observing the polarities.
- 20) Connect the brown wire from the ignition box with the main wiring loom earth wire on the ignition coil mounting screw.
- 21) Connect the red fused feed wire to the positive '+' terminal of the ignition coil.
- 22) Connect the M5 eyelet end of the red fuse wire to the positive '+' battery terminal.
- 23) Check all connections are good and tight and wires fitted neatly (use small tie straps to secure).
- 24) Refit petrol tank and pipes.
- 25) Remove rubber timing hole bung in left hand engine side casting.
- 26) Start engine and run for three to five minutes for it to warm up.
- 27) Connect the strobe lamp and time through the timing hole to the Full Advance Mark (F) dot with the engine running at 4000 RPM.  
The final timing position is obtained by moving the stator plate on its slotted holes; Adjustments should be made with the engine stationary, the screws being re-tightened after each adjustment. The timing mark can be seen as the electronic advance is operating, when the engine is speeded up. Anticlockwise movement of the stator plate will advance the ignition timing.  
Set the timing 3 to 4 degrees more retarded than the 'F' mark for this Twin plug ignition.
- 28) Remove the battery earth wire from the rear engine case, and refit the front engine cover and horn.
- 29) Refit the battery earth wire, timing hole bung and tool kit. The ignition is now set and needs no maintenance.

Fig. 1.



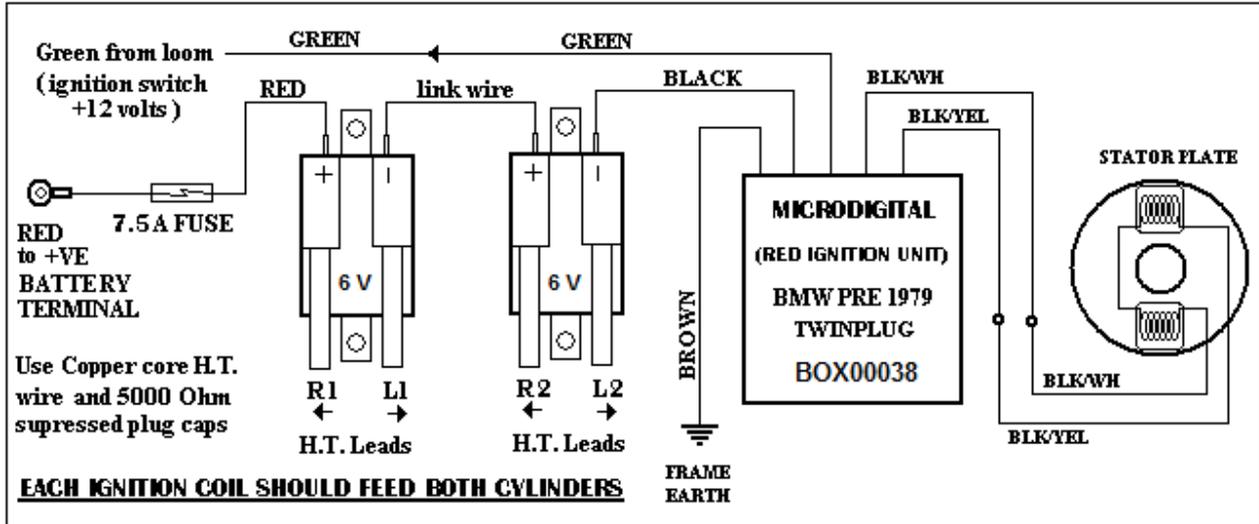
PLEASE TURN OVER

BMMP

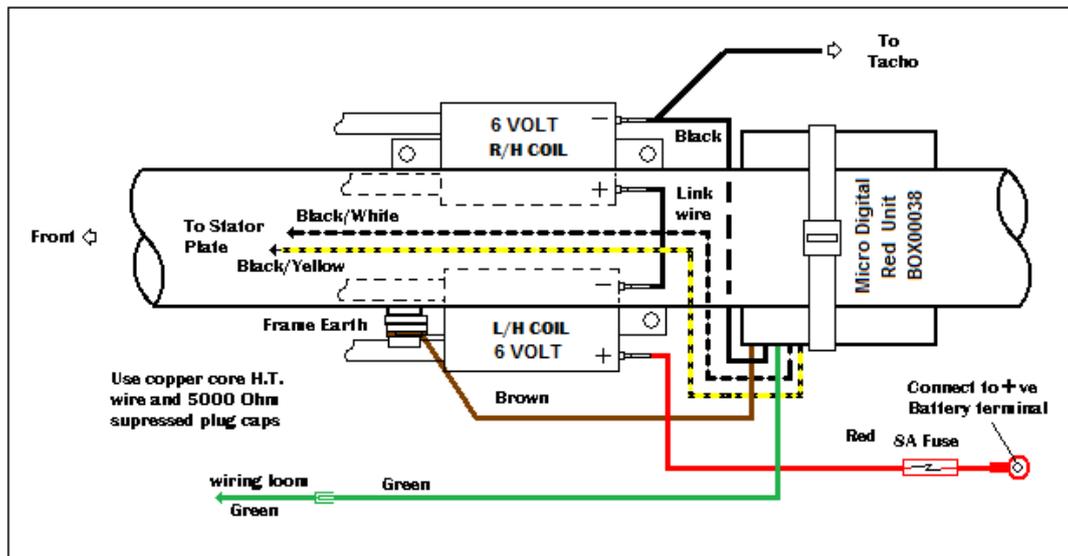
# WARNING

**HIGH VOLTAGES DEVELOPED BY THIS UNIT CAN BE VERY DANGEROUS  
ALWAYS SWITCH OFF BEFORE WORKING ON THE SYSTEM.**

**Fig.2.**



**Fig.3.**



**NOTE**

The recommended electrical installation (above Fig.3.) is designed to reduce the electrical loading on the bikes original ignition switch to improve reliability.

We have found that some pre-79 BMW models, when wired this way, fail to stop running when the kill switch is operated. This is due to the very small current required to keep the electronics running in the ignition unit.

To overcome this problem the brake light can be operated or the ignition supply can be wired as below in Fig.4. This allows the ignition coil also to take its power from the standard ignition switch supply (green wire), the Red fused battery link wire is removed.

**Fig.4.**

